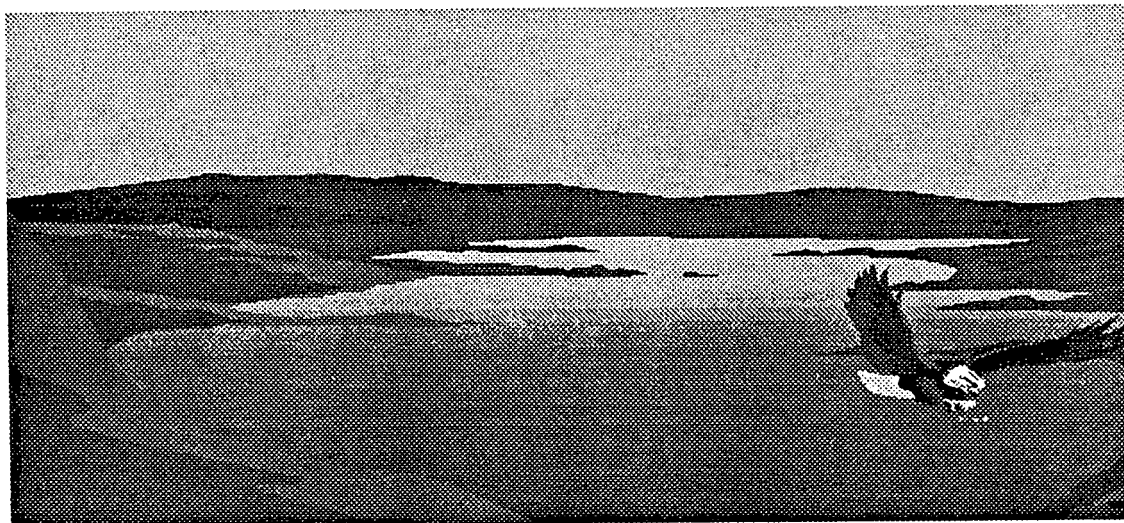


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ENVIRONMENTAL RESTORATION PROGRAM

Monthly Report For
July, 1991



August 20, 1991



EG&G ROCKY FLATS

ADMINISTRATIVE

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A-SW-001395

**U.S. DEPARTMENT OF ENERGY
ROCKY FLATS PLANT**

**ENVIRONMENTAL RESTORATION
PROGRAM**

MONTHLY REPORT FOR

JULY 1991

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1.0 INTRODUCTION

This Monthly Status Report presents the current status and technical achievements of the Rocky Flats Environmental Restoration Program for July 1991. This Program implements the Interagency Agreement between the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the State of Colorado to investigate, assess, and remediate, where necessary, contaminated areas at or adjacent to DOE's Rocky Flats Plant in Golden, Colorado. This agreement was signed on January 22, 1991. The work is being performed for DOE by EG&G Rocky Flats, Inc.

Section 2.0 of this report, the Executive Summary, highlights significant achievements and summarizes the milestones completed during July. It also presents any major unresolved issues of the Program. Technical progress, schedule status, and milestone status for each Operable Unit as well as other Program activities are presented in Section 3.0. Operable Units in which no FY91 activity is planned are not included. Section 4.0 contains the schedules for routine environmental sampling as required by paragraph 210 of the Interagency Agreement. Section 5.0 contains a list which identifies the contractors and subcontractors performing work on the Program as required by paragraph 13 of the IAG.

2.0 EXECUTIVE SUMMARY

2.1 SIGNIFICANT ACTIVITIES AND ACHIEVEMENTS FOR THE REPORT MONTH

The RFI/RI drilling program for OU1 is planned to start on August 1, 1991. Drillers and all associated crews have mobilized for the August 1 start date.

Final design/specification revisions for the OU1 Phase II-B french drain were completed July 12, 1991. The contract definition meeting for the french drain construction was held July 15 and the advance notice advertisement was released July 16, 1991. The construction package was reviewed by DOE, and bid packages were available for review by potential bidders on July 26, with bids due by August 23, 1991. Construction activities for the french drain will begin by September 3, 1991 to meet the IAG schedule.

ET LaFore, EG&G's subcontractor for the OU1 Phase II-A equipment installation, completed the equipment pads inside the 891 Treatment Building during the last week of July. Pipe hangers are being installed, and protective coating will be applied to the building sump and acid/caustic containment areas. Everything is in order for the August 5, 1991 IAG milestone date for startup of systems operation testing.

The OU2 RFI/RI Work Plan (Bedrock) was completed and delivered to EPA/CDH on July 2, 1991, the IAG milestone date.

The final OU2 Phase II RFI/RI Work Plan (Alluvial) was revised and will be submitted to EPA/CDH for approval. This issue will represent all the changes, revisions and editing on the work plan from November 1990 to date.

OU2 drilling activities are scheduled to begin on August 21, 1991, three weeks after OU1 drilling begins. This delay will allow the OU2 drilling program to learn from the experiences of the OU1 program, therefore making it a more efficient process.

EG&G is coordinating the acquisition of DOE/UMTRA radionuclide removal equipment which will be used on the OU2 South Walnut Creek - Phase II Interim Remedial Action.

The OU3 Offsite Areas draft RFI/RI Work Plan was delivered to EPA/CDH on July 10, 1991, its IAG milestone delivery date.

CDH has requested DOE/RFO to prepare an IM/IRA Work Plan for the surge tanks and flash evaporators which will be used to treat groundwater collected from the area adjacent to the OU4 Solar Evaporation Ponds area. EG&G Purchasing completed review of the Statement of Work (SOW) for the plan, and a contract for the work was negotiated and awarded to a subcontractor. A kickoff meeting with the subcontractor and EG&G staff was held on July 24, 1991 to review the scope of the IM/IRA.

On July 22, 1991, the final Plan for the Prevention of Contaminant Dispersion (PPCD) was submitted to EPA/CDH for review, and on July 30, 1991, a 60-day public comment period on the plan began. A public information meeting is scheduled for August 13, 1991, and a public comment workshop is scheduled for September 5, 1991.

2.2 PROBLEMS AND PROGRAMMATIC ISSUES

Procurement of the OU1 Phase II-A ion exchange system and effluent storage tanks is being delayed. There is currently a shortage of the required American-made ASME-certified tanks. The best contractor estimate on the delivery date of the ion exchange tanks and effluent storage tanks is October 1991, and January 1992, respectively. Negotiations with the contractor are taking place in order to expedite the procurement of these tanks. The delay will not impact completion of the milestone for start of IRA testing in August 1991.

Remedial actions for OU3 - Offsite Areas required under the 1985 McKay vs. U.S. Settlement Agreement may be in conflict with CERCLA. Tilling of the land surface to mix plutonium-contaminated surface soil, as required under the Settlement Agreement, prior to completion of the RI/FS, will probably not be acceptable to EPA. The remedial action as determined by the RI/FS process, if any, will probably not include plutonium soil mixing through tilling. EPA/CDH and DOE staff are working to resolve the issue.

Western Aggregate has submitted a request to DOE to mine the mineral resources for which they own the rights and which are under a portion of the western edge of the Rocky Flats Plant. The land in question is located within OU11 - West Spray Field. DOE has had preliminary discussions with EPA on this matter, and EPA agrees with DOE that any decision on mining operations should be delayed until the OU assessment is complete. The DOE-RFO legal staff is reviewing the request from Western Aggregate.

2.3 NEAR-TERM IAG MILESTONES

<u>OU#</u>	<u>Milestone Description</u>	<u>Scheduled Completion</u>	<u>Actual Completion</u>
02	Submit Final Phase II RFI/RI Work Plan (Bedrock)	02 Jul 91	02 Jul 91
03	Submit Draft Phase I RFI/RI Work Plan	10 Jul 91	10 Jul 91
SW	Submit Final Plan for Prevention of Contaminant Dispersion	22 Jul 91	22 Jul 91
01	Begin IM/IRA Testing	05 Aug 91	
SW	Submit Final Radionuclide Discharge Limits Plan	13 Aug 91*	
05	Submit Final Phase I RFI/RI Work Plan	30 Aug 90	
07	Submit Final Phase I RFI/RI Work Plan	28 Aug 91	

* Request to extend completion of this milestone to September 20, 1991 to be submitted to EPA/CDH.

3.0 PROJECT STATUS

3.1 OU1 - 881 HILLSIDE AREA

DESCRIPTION:

The soil and groundwater at the 881 Hillside Area, located north of Woman Creek in the southeast section of RFP, were potentially contaminated in the 1960s and 1970s with solvents and radionuclides. The various individual hazardous substance sites that make up OU1 are being investigated and treated as high-priority sites because of elevated concentrations of organic compounds in the near-surface groundwater and the proximity of the contamination to a drainage system leading to an offsite drinking water supply. The selected Interim Remedial Action (IRA) at OU1 involves construction of an underground drainage system (french drain) that will intercept and contain contaminated groundwater flowing from the OU1 area. The contaminated water will be treated and released back into the interceptor ditch alongside Woman Creek.

3.1.1 OU1 ASSESSMENT

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase III RFI/RI Work Plan
Submit Final Phase III RFI/RI Work Plan

06 Feb 90
31 Oct 90

JULY WORK ACTIVITY STATUS:

Environmental radiation worker training for the OU1 RFI/RI field work was held on July 18, 1991 to train all subcontractor field personnel not previously trained. Final preparation for the start of drilling activities continued.

PLANNED WORK FOR AUGUST:

The drilling program for OU1 is planned to start on August 1, 1991. Drillers and all associated crews have mobilized for the August 1 start date.

PROBLEMS: None

OPEN ITEMS: None

3.1.2 OU1 REMEDIATION

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Proposed IM/IRA Decision Document	18 Sep 89
Submit Proposed IM/IRA Decision Document	06 Oct 89
Submit Final IM/IRA Decision Document	05 Jan 90
Begin Phase I-A IM/IRA Construction	15 Jan 90
Restart Phase I-A IM/IRA Construction (after shutdown)	20 Jun 90
Begin Phase I-B IM/IRA Construction (ahead of schedule)	28 Sep 90
Submit IM/IRA Implementation Document	22 Feb 91
Begin Phase II-A IM/IRA Construction	01 Apr 91

JULY WORK ACTIVITY STATUS:

Final design/specification revisions for the Phase II-B french drain were completed July 12 and the contract definition meeting for the french drain construction was held July 15, 1991. The advance notice advertisement was released July 16, 1991, the construction package was reviewed by DOE and bid packages were available for review by potential bidders on July 26, with bids due by August 23, 1991. Construction activities for the french drain will begin by September 3, 1991 to meet the IAG schedule.

Negotiations for the Phase II-A effluent tank construction were completed July 20, 1991. The contract is expected to be awarded on August 2, 1991.

ET LaFore, EG&G's subcontractor for the Phase II-A equipment installation, completed the equipment pads inside the 891 Treatment Building during the last week of July. Pipe hangers are being installed, and protective coating will be applied to the building sump and acid/caustic containment areas. Everything is in order for the August 5, 1991 IAG milestone date for startup of systems operation testing.

PLANNED WORK FOR AUGUST:

Systems operations testing of the 881 Hillside Treatment Building sump pump system is scheduled to begin August 5, 1991, the IAG milestone date for the start of IRA testing.

The contract for the Phase II-A effluent tank construction will be awarded in early August 1991.

Receipt of bids for Phase II-B french drain construction is scheduled for August 23, 1991. Construction activities for the french drain are scheduled to begin by September 3, 1991, in accordance with the IAG schedule.

PROBLEMS:

Procurement of the Phase II-A ion exchange system and effluent storage tanks is being delayed. There is currently a shortage of the required American-made ASME-certified tanks. The best contractor estimate on the delivery date of the ion exchange tanks and effluent storage tanks is January 1992. Negotiations with the contractor are taking place in order to expedite the procurement of these tanks. The delay will not impact completion of the milestone for start of IRA testing in August 1991.

OPEN ITEMS: None

3.2 OU2 - 903 PAD, MOUND, AND EAST TRENCHES

DESCRIPTION:

The contamination at the 903 Pad and Mound areas is largely attributed to the storage in the 1950s and 1960s of waste drums that corroded over time, allowing hazardous and radioactive material to leak into the surrounding soil. Additional contamination may have resulted from wind dispersion during removal and soil movement activities. The East Trenches Area was used for disposal of plutonium- and uranium-contaminated waste and sanitary sewage sludge from 1954 to 1968. Two areas adjacent to the trenches were used for spray irrigation of sewage treatment plant effluent, some of which may have contaminants that were not removed by the treatment system.

The IM/IRA Plan provides for surface water seeps in source areas of contamination to be collected, treated, and discharged to the surface water system. Operation of a field-scale treatability unit began for the Walnut Creek drainage in 1991. The effectiveness of the treatment process will be evaluated at three locations: the entrance to the treatment facility, several points within the facility, and the discharge point. After completion of the field-scale treatability tests, the unit is anticipated to remain in service until the final remedial action is operational. Bench-scale testing of surface water in the Woman Creek drainage is planned for the spring of 1991, after which a separate Interim Remedial Action Plan for this drainage will be developed.

3.2.1 OU2 ASSESSMENT

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase II RFI/RI Work Plan (Alluvial)	21 Dec 89
Submit Final Phase II RFI/RI Work Plan (Alluvial)	12 Apr 90
Submit Draft Phase II RFI/RI Work Plan (Bedrock)	05 Feb 91
Submit Final Phase II RFI/RI Work Plan (Bedrock)	02 Jul 91

JULY WORK ACTIVITY STATUS:

The RFI/RI Work Plan (Bedrock) was completed and delivered to EPA/CDH on July 2, 1991, the IAG milestone date.

PLANNED WORK FOR AUGUST:

The OU2 RFI/RI drilling activities are scheduled to begin on August 21, 1991, three weeks after OU1 drilling begins. This delay will allow the OU2 drilling program to learn from the experiences of the OU1 program, therefore making it a more efficient process.

PROBLEMS: None

OPEN ITEMS: None

3.2.2 OU2 REMEDIATION

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Proposed IM/IRA Decision Document	19 Jun 90
Submit Proposed Plan IM/IRA Decision Document	18 Sep 90
Submit Draft Responsiveness Summary	13 Dec 90
Submit Draft Responsiveness Summary and Final IM/IRA Decision Document	11 Jan 91
Field Treatability Test System Installation Complete	12 May 91
Begin Field Treatability Tests	13 May 91

JULY WORK ACTIVITY STATUS:

A preliminary assessment of the surface water treatment data from the OU2 South Walnut Creek IRA for May and June concludes that contaminants were present in the surface water in less than anticipated concentrations and that the treatment system removed the contaminants as planned.

EG&G is coordinating the acquisition of DOE/UMTRA radionuclide removal equipment which will be used on the South Walnut Creek - Phase II Interim Remedial Action. EG&G staff travelled to Grand Junction on July 30, 1991 to view the treatment equipment prior to purchase. The equipment is appropriate and appears to be in excellent condition. M. K. Ferguson, DOE/UMTRA's contractor, is to provide responses by August 9, 1991 to resolve several issues identified at that meeting. Property transfer activities between EG&G Rocky Flats and M. K. Ferguson have also been initiated.

PLANNED WORK FOR AUGUST:

Operation of the South Walnut Creek IRA GAC unit will continue.

Work on procurement, delivery, and setup of the UMTRA unit at RFP will continue.

PROBLEMS: None

OPEN ITEMS: None

3.3 OU3 - OFFSITE AREAS

DESCRIPTION:

OU3 can be divided into two categories based on the two drivers of the activities. The IAG directs activities according to CERCLA. This involves assessment of contamination in offsite areas also referred to as Individual Hazardous Substance Sites (IHSSs) (previously referred to as SWMUs): Contamination of the Land Surface (IHSS 199), Great Western Reservoir (IHSS 200), Standley Lake (IHSS 201), and Mower Reservoir (IHSS 202). The second category responds to a 1985 out-of-court lawsuit settlement, McKay v. U.S., which directed that the surface soil contamination be remediated. Remedial activities in compliance with the Settlement Agreement (deep disc plowing) began in 1985. The disturbance resulting from remediation is being revegetated with mediocre success. The overall schedule for this activity is determined by the year-to-year success of the revegetation effort and requirements of the land owners.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Past Remedy Report	26 Oct 90
Submit Draft Historical Information/Preliminary Health Risk Assessment Report	09 Nov 90
Submit Final Past Remedy Report	02 Apr 91
Submit Final Historical Information/Preliminary Health Risk Assessment Report	16 Apr 91
Submit Draft Phase I RFI/RI Work Plan	10 Jul 91

JULY WORK ACTIVITY STATUS:

The Offsite Areas draft RFI/RI Work Plan was delivered to EPA/CDH on July 10, 1991, its IAG milestone delivery date.

A presentation on the OU3 Offsite Areas was made to the Technical Review Group (TRG) July 10, 1991. The TRG members received copies of the Past Remedy Report and the draft OU3 RFI/RI Work Plan. The 3-hour presentation included a review of both documents. The TRG will meet again August 15th after having reviewed the Work Plan, with comments and questions for discussion.

The semi-annual report to Jefferson County on the Remedy Lands is being prepared. This report will summarize results of plutonium and americium analyses of soil samples from the Remedy Lands and current revegetative activities to meet requirements of the Settlement Agreement.

PLANNED WORK FOR AUGUST:

The Risk Education Group presentation will be made to representatives of local municipalities on August 8, 1991 at the Westminster Recreation Center.

The TRG will meet on August 15th after having reviewed the draft RFI/RI Work Plan, with comments and questions for discussion.

PROBLEMS:

Remedial actions required under the 1985 McKay vs. U.S. Settlement Agreement may be in conflict with CERCLA. Tilling of the land surface to mix plutonium contaminated surface soil, as required under the Settlement Agreement, prior to completion of the RI/FS will probably not be allowed by EPA. The remedial action as determined by the RI/FS process, if any, will probably not include plutonium soil mixing through tilling.

OPEN ITEMS:

The draft RFI/RI Work Plan is being reviewed by EPA/CDH. Review comments are due October 7, 1991.

3.4 OU4 - SOLAR PONDS

DESCRIPTION:

Five evaporation ponds were used for storage of low-level radioactive process waste, sanitary treatment plant effluent, and contaminated groundwater collected downgradient of the ponds. The ponds are RCRA interim status regulated units that are currently under closure. Leakage from the ponds has contaminated soils and groundwater with various contaminants, including heavy metals and uranium.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

08 Jun 90

JULY WORK ACTIVITY STATUS:

CDH has requested DOE/RFO to prepare an IM/IRA Action Plan for the surge tanks and flash evaporators which will be used to treat groundwater collected from the area adjacent to the Solar Evaporation Ponds. EG&G Purchasing completed review of the Statement of Work (SOW) for the plan and a contract for the work was negotiated and awarded to a subcontractor. A kickoff meeting with the subcontractor and EG&G staff was held on July 24, 1991 to review the scope of the IM/IRA. A draft of the Action Plan is scheduled to be completed by August 2, 1991.

PLANNED WORK FOR AUGUST:

The draft IM/IRA Work Plan for the Solar Evaporation Ponds will be completed by EG&G on August 2, 1991 and submitted to RFO for review. The IM/IRA is scheduled to be submitted to EPA/CDH by August 15, 1991.

PROBLEMS:

The delay in removal of sludge from the solar ponds will impact the scheduled start of the RFI/RI field activities in January 1992. The impact of this delay on IAG milestones is being evaluated.

OPEN ITEMS: None

3.5 OU5 - WOMAN CREEK

DESCRIPTION:

This activity encompasses assessment and remediation at the Woman Creek drainage, to include: Original Landfill; Ash Pits 1-4, Incinerator, and Concrete Wash Pad; Retention Ponds C-1 and C-2; and the surface disturbance southeast of Building 881.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

05 Apr 91

JULY WORK ACTIVITY STATUS:

EPA/CDH returned their comments on the draft Phase I RFI/RI Work Plan and Quality Assurance Addendum on July 8, 1991. Incorporation of comments and preparation of the final Work Plan began on July 9, 1991.

The final Environmental Evaluation (EE) Work Plan (Chapter 9 of the OU5 Work Plan) was approved by EPA/CDH to begin the EE field work.

PLANNED WORK FOR AUGUST:

Incorporation of comments and finalization of the final RFI/RI Work Plan will be completed, and the plan will be delivered to EPA/CDH on August 30, 1991, the IAG milestone date.

PROBLEMS: None

OPEN ITEMS: None

3.6 OU6 - WALNUT CREEK

DESCRIPTION:

This activity encompasses assessment and remediation at the Walnut Creek Drainage, to include: Sludge Dispersal; Retention Ponds A-1, A-2, A-3, A-4, A-5, B-1, B-2, B-3, B-4, and B-5; Old Outfall; Triangle Area; Trenches A, B, and C; and the North section of the East Spray Field.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

19 Apr 91

JULY WORK ACTIVITY STATUS:

The regulatory agencies review of the draft Phase I RFI/RI Work Plan was completed on July 18, 1991. Incorporation of comments and preparation of the final plan is underway.

PLANNED WORK FOR AUGUST:

Resolution of agency issues and preparation of the draft Phase I RFI/RI Work Plan will continue through August.

PROBLEMS: None

OPEN ITEMS: None

3.7 OU7 - PRESENT LANDFILL

DESCRIPTION:

The Present Landfill began operation in 1968. The landfill provided a means of disposing nonradioactive and nonhazardous solid waste. Some of the solid wastes from the plant, which were disposed in the landfill, are suspected to have contained hazardous waste and/or hazardous constituents. Although currently operating as a nonhazardous sanitary landfill, the facility is considered an inactive hazardous waste disposal unit undergoing RCRA closure.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

08 Jun 90

JULY WORK ACTIVITY STATUS:

Incorporation of new information into the draft Phase I RFI/RI Work Plan continued through July 1991.

PLANNED WORK FOR AUGUST:

The final Phase I RFI/RI Work Plan is on schedule for its IAG milestone submittal date of August 28, 1991.

PROBLEMS: None

OPEN ITEMS: None

3.9 OU9 - ORIGINAL PROCESS WASTE LINES

DESCRIPTION:

This activity involves characterizing a series of tanks and associated process waste lines. The system was constructed to transport and temporarily store aqueous process wastes. Soil characterization studies will determine the need for soil removal and/or treatment.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

08 Jun 90

JULY WORK ACTIVITY STATUS:

EPA/CDH began their review of the draft Phase I RFI/RI Work Plan on July 3, 1991.

PLANNED WORK FOR AUGUST:

The regulatory agency review of the draft Phase I RFI/RI Work Plan will continue through August 1991.

PROBLEMS: None

OPEN ITEMS:

EPA/CDH review comments on the RFI/RI Work Plan are due September 30, 1991.

3.10 OU10 - OTHER OUTSIDE CLOSURES

DESCRIPTION:

OU10 is made up of 18 IHSSs consisting of various hazardous waste units. An RFI/RI Work Plan is currently in preparation. The primary components of the RFI/RI Work Plan for OU10 will be a Field Sampling Plan (FSP), Baseline Risk Assessment Plan (BRAP), and an EE Work Plan.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

The first IAG milestone for this OU is scheduled for November 1991.

JULY WORK ACTIVITY STATUS:

Three additional individual hazardous substance sites (IHSSs) were transferred from other operable units to OU10 after the draft RFI/RI Work Plan was completed in FY90. The draft Work Plan was based on the draft IAG which was modified during final IAG negotiations. A contract modification has been initiated to incorporate the three IHSS and to perform general upgrades to the plan.

PLANNED WORK FOR AUGUST:

No activity.

PROBLEMS: None

OPEN ITEMS: None

3.11 OU11 - WEST SPRAY FIELD

DESCRIPTION:

The West Spray Field is located within Rocky Flats property boundary immediately west of the plant security area. The West Spray Field was in operation from April 1982 to October 1985. During operation, excess liquids from the solar evaporation ponds 207-B North and Center (contaminated groundwater in the vicinity of the ponds and treated sanitary sewage effluent) were pumped periodically to the West Spray Field for spray application. The spray field boundary covers an area of approximately 105.1 acres, 38.3 of which received direct application of hazardous waste. The RFI/RI process will entail field studies to determine the presence and levels of hazardous constituents in soil and groundwater.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Phase I RFI/RI Work Plan

08 Jun 90

JULY WORK ACTIVITY STATUS:

EPA/CDH review of the draft Phase I RFI/RI Work Plan began July 31, 1991.

Preliminary field assessment for the OU11 Environmental Evaluation (EE) Work Plan preparation was completed in July. This field sampling will allow a detailed field sampling plan and discussion of target species and contaminants of concern to be incorporated into the OU11 EE Work Plan. The draft EE Work Plan was also edited so that it conforms with the format and content selected for the other OU's EE Work Plans. This will provide better coordination between OUs and will allow data collected at OU11 to better conform to data collected at other OUs.

PLANNED WORK FOR AUGUST:

The regulatory agency review of the draft Phase I RFI/RI Work Plan will continue through August 1991.

PROBLEMS:

Western Aggregate has submitted a request to DOE to mine the mineral resources for which they own the rights and which are under a portion of the western edge of the Rocky Flats Plant. The land in question is located within Operable Unit 11 - West Spray Field. DOE has had preliminary discussions with EPA on this matter, and EPA agrees with DOE that a decision for any mining operations should be delayed until the OU assessment is complete. The DOE/RFO legal staff is reviewing the request from Western Aggregate.

OPEN ITEMS:

EPA/CDH review comments on the draft RFI/RI Work Plan are due October 25, 1991.

3.12 SITEWIDE ACTIVITIES

DESCRIPTION:

Sitewide activities include several tasks that encompass a wide variety of plans, procedures, reports, studies, and other activities required by the IAG and that apply to RFP in general.

SCOPE OF WORK CHANGES: None

TECHNICAL APPROACH CHANGES: None

MILESTONE ACCOMPLISHMENTS:

Submit Draft Background Study Report (Water)	15 Dec 89
Submit Draft Background Study Report (Soils)	15 Dec 89
Submit Draft Community Survey Plan	23 Jan 90
Submit Final Community Survey Plan	22 Mar 90
Submit Draft Health and Safety Plan	15 Aug 90
Submit Draft Quality Assurance Project Plan	29 Aug 90
Submit Draft Standard Operating Procedures	29 Aug 90
Submit Draft Plan for Prevention of Contaminant Dispersion	19 Sep 90
Submit Draft Treatability Study Plan	21 Sep 90
Submit Draft Community Relations Plan	01 Nov 90
Submit Final Health and Safety Plan	12 Nov 90
Submit Revised Background Study Report	21 Dec 90
Submit Final Community Relations Plan	22 Jan 91
Submit Final Quality Assurance Project Plan	01 Mar 91
Submit Final Standard Operating Procedures	01 Mar 91
Submit Draft Radionuclides Discharge Limits Plan	05 Apr 91
Submit Community Relations Plan Responsiveness Summary	21 Jun 91
Submit Final Treatability Study Plan	03 Jun 91
Submit Final Plan for Prevention of Contaminant Dispersion	22 Jul 91

JULY WORK ACTIVITY STATUS:

Plan for Prevention of Contaminant Dispersion

On July 22, 1991, the final Plan for the Prevention of Contaminant Dispersion (PPCD) was submitted to EPA/CDH for review, and on July 30, 1991, a 60-day public comment period on the plan began.

Environmental Evaluations

Environmental Evaluation vegetation data summary, analysis, and sample size determination of the peak standing crop biomass vegetation clipping scheduled to be started in mid-August have been initiated. Insect collection on OU1 transect was completed.

Selection criteria for target species for assessment and measurement of the impacts on biota (other than humans or domestic animals) were developed for presentation at the next meeting of the Risk Assessment Technical Working Group meeting on August 9, 1991. These criteria will be used to select specific taxa

(species, genus, family, functional group, etc.) for detailed examination in the Environmental Evaluation portion of the Baseline Risk Assessment for the RFI/RI Report.

Polychlorinated Biphenyl (PCB) Contamination

In January 1991, EG&G Rocky Flats discovered a potential oil leak in the vicinity of transformer 707-1 on the roof of Building 707. Subsequent to discovery of the oil leak, limited samples were collected from the transformer, roof, and nearby soils to verify the presence or absence of PCB contamination. The sample results indicated that PCBs were present at all three locations. In March 1991, a more extensive characterization effort was initiated in relation to the building roof and soils adjacent to the drain from the roof.

Once PCBs were determined to be present as a result from a historical release from the vicinity of transformer 707-1, a corrective action plan was developed for Building 707 and additional investigations were initiated relative to PCB sites.

A preliminary search of RFP files, documents, and discussions with plant personnel from various departments indicated an additional 33 sites. A more thorough file search is currently in progress to further assess additional potential PCB sites.

EG&G notified DOE/RFO that there was a historical PCB release from Building 707, and DOE notified EPA/CDH in accordance with the IAG requirements.

PCB soil sampling at Rocky Flats resumed July 22, 1991 and was completed July 26, 1991. A Statement of Work is being prepared for preparation of a PCB assessment report that will be delivered to DOE/RFO in November 1991.

PLANNED WORK FOR AUGUST:

The public comment period on the final PPCD will continue through August 1991. A public information meeting is scheduled for August 13, 1991, and a public comment workshop is scheduled for September 5, 1991.

Resolution of EPA/CDH comments on the Radionuclides Discharge Limits Plan (RDLP) will continue through August 1991.

PROBLEMS:

Resolution of EPA/CDH comments on the RDLP is continuing. A letter from DOE will be submitted to EPA/CDH requesting an extension of the milestone completion date for completion of the final plan. This extension will allow a 41-day period for this activity which is the duration specified in the IAG schedule. This request is necessary because of the extension granted by the regulatory agencies for submittal of the draft plan and the additional time required by the agencies to complete their review of the draft plan.

OPEN ITEMS: None

4.0 ROUTINE ENVIRONMENTAL MONITORING

The following generalized sampling schedule for Routine Environmental Monitoring is provided as requested in Section 210 of the IAG. Detailed quarterly monitoring schedules are prepared in advance and are available to EPA and CDH upon request from the Environmental Monitoring and Assessment Division, Environmental Management Department, and EG&G Rocky Flats, Inc. The schedules are lengthy; therefore, they are not reproduced here. An EPA- or State-authorized representative may make arrangements to observe fieldwork and to obtain split or duplicate samples.

SURFACE WATER AND SEDIMENTS:

Each of the Surface Water Stations (approximately 120 stations) are sampled monthly.

Each of the Sediment Stations (approximately 40 stations) are sampled quarterly.

Each surface water and sediment sample is analyzed for the following parameters:

CLP TCL VOAs
CLP TAL Metals
plus Cesium
Lithium
Molybdenum
Strontium
Tin

Major Anions
Radionuclides
Field Parameters
pH
Temperature
Specific Conductivity
Dissolved Oxygen (DO)
Turbidity

SOILS:

Each of the Soil Stations (located at 1- and 2-mile radii from the plant center) are sampled annually.

Each soil sample is analyzed for plutonium and americium.

GROUNDWATER:

259 of the 371 total Groundwater Stations are sampled quarterly; this includes alluvial wells, bedrock wells, and pre-1986 wells. Approximately one third of the wells are monitored monthly for water levels.

Each groundwater sample is analyzed for CLP TCL VOAs, CLP TAL Metals, as well as the following parameters:

Radiochemical Parameters

Gross Alpha	Tritium
Gross Beta	Lithium
Plutonium	Uranium
Americium	Cesium
Strontium	Tin
Molybdenum	

Inorganic Parameters

Nitrate/Nitrite
Total Phosphorous
Ortho-Phosphate
Ammonia

Field Parameters

Dissolved Oxygen (DO)
Specific Conductivity
Temperature
Turbidity
pH

5.0 CONTRACTOR/SUBCONTRACTOR IDENTIFICATION

Contractors and subcontractors being used on the Rocky Flats Plant Environmental Restoration Program and the work they are performing are identified on the following list as required by paragraph 13 of the IAG.

OU	PROJECT	SUBCONTRACTOR	SUB- SUBCONTRACTOR	WORK DESCRIPTION	START DATE
1	Assessment	Ebasco	Dames & Moore Stoller Corp.	OU1 RFI/RI fieldwork (drilling, well development/ completion, sampling) and RI report	Apr-91
1	Remediation	TBD		Construct/install effluent storage tanks for OU1 IRA	Jun-91
1	Remediation	Bruner		OU1 IRA ion exchange system	Feb-91
1	Remediation	E.T. LaFore		Installation of Phase II-A treatment system equipment for OU1 IRA	Jun-91
1	Remediation	Eng. Sciences		Design Phase II-B French drain for OU1 881 Hillside IRA	Sep-90
1	Remediation	TBD		Construct Phase II-B French drain at OU1 IRA	Aug-91
1	Remediation	P.S.I.		UV bench scale testing for volatile organics	Aug-91
2	Assessment	Woodward-Clyde		OU2 RFI/RI Work Plan (alluvial & bedrock) and RI fieldwork (drilling, well completion/development)	Sep-90
2	Assessment	Weston		OU2 RFI/RI Alluvial Work Plan	Nov-90
2	Remediation	Riedel Env. Svcs.		Construct/install GAC/FTU system for South Walnut Creek phase of OU2 IRA.	Apr-91
2	Remediation	Stearns Rogers		Design chemical precipitation/membrane filtration system for South Walnut Creek phase of OU2 IRA	Jun-91
2	Remediation	Weston		IRAP, EA, Risk Assessment, and Historical Assessment for Walnut Creek	Jun-91
2	Remediation	TBD		Mfg./install chem. precip/filtration unit for South Walnut Creek phase of OU2 IRA	Sep-91
2	Remediation	Woodward-Clyde		Conduct bench-scale tests on surface water	May-91
3	Assessment	IT Corporation	CH2M Hill	OU3 RI Work Plan	Mar-91
3	Assessment	TBD		Revegetate offsite lands	TBD
4	Assessment	IT Corporation		OU4 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	TBD
4	Remediation	IT Corporation		Prepare OU4 IM/IRA Action Plan	Jul-90
5	Assessment	Woodward-Clyde		OU5 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	Feb-90
6	Assessment	Woodward-Clyde		OU6 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	Feb-90

OU	PROJECT	SUBCONTRACTOR	SUB- SUBCONTRACTOR	WORK DESCRIPTION	START DATE
7	Assessment	IT Corporation	Stoller Corp.	OU7 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	Apr-90
9	Assessment	IT Corporation		OU9 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	Mar-90
10	Assessment	Ebasco		OU10 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	TBD
11	Assessment	IT Corporation		OU11 RFI/RI Work Plan including Environmental Evaluation Plan and Quality Assurance Addendum	TBD
SW	Hist. Rel. Rep.	IT Corporation	Doty & Assoc.	Prepare Historical Release Report	Feb-91
SW	PCB Assess.	TBD		Prepare PCB Assessment Report	Sep-91
SW	Adm. Record	Tech		Maintain IAG Administrative Record	Oct-90
SW	Geolog. Char.	ASI		Geologic Characterization, Data Base, and graphics	Feb-90
SW	Monitoring	Ebasco		Analytical Services for groundwater, surface water, and sediment	Dec-90
SW	Monitoring	IT Corporation		Analytical Services for groundwater, surface water, and sediment	Jul-90
SW	Fld. Oversight	Ebasco	Stoller Corp	ER field operations oversight	Oct-90
SW	Treatability	Ebasco		Sitewide treatability studies - Pu contaminated soils	Apr-90
SW	Treatability	Woodward-Clyde		Technical evaluation of sitewide treatability studies	Jul-90
SW	PPCD	Ebasco		Plan for Prevention of Contaminant Dispersion	Jun-90
SW	QA	Ebasco	SAIC	Develop and implement quality assurance program and field operations oversight	Dec-90
PM	Support	Ebasco	Stoller Corp.	Program Management Support	Feb-90